



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,191	08/21/2000	Thomas P. Blackadar	P0663/7019	8703
7590	03/29/2004		EXAMINER	
Randy J Pritzker Wolf Greenfield & Sacks PC 600 Atlantic Avenue Boston, MA 02210				VO, HIEN XUAN
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*SM*

## Office Action Summary

Application No.	09/643,191	Applicant(s)	BLACKADAR ET AL.
Examiner	Hien X. Vo	Art Unit	2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 21 August 2000.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-91 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8, 10-20, 26-43 and 48-91 is/are rejected.

7) Claim(s) 9, 21-25 and 44-47 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 25 October 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5, 7, 11, 12.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_ .

**DETAILED ACTION**

This application has been examined. Claims 1-91 are pending.

***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 04/09/01, 03/15/02, 01/08/03, 03/05/03. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Drawings***

2. The drawings were received on 10/25/02. These drawings are accepted.

***Specification***

3. On page 1 of the specification, applicant is required to update the current status of the parent applications serial No. 09/547,975, 09/547,976, 09/547,977 and 09/548,217. Correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-8, 10-20, 26-43, 48-91 rejected under 35 U.S.C. 102(e) as being anticipated by Richardson et al. (U.S. Patent No. 6,135,951).

With respect to claims 1-4, Richardson et al. disclose a portable aerobic fitness monitor for walking and running that include determining at least one calculated parameter based upon at least one determined performance parameter of the user and at least one determined variable physiological parameter of the user (see e.g. Figs. 1-2), at least one determined performance parameter of the user includes at least one determined foot contact time of the user (see e.g. col. 1, lines 31-35), and at least one determined variable physiological parameter of the user includes at least one determined heart rate of the user (see e.g. col. 1, lines 23-24), at least one calculated parameter is proportional to the at least one determined foot contact time of the user multiplied by the at least one determined heart rate of the user (see e.g. col. 30), at least one determined performance parameter and the at least one determined variable

physiological parameter in an equation having the performance parameter and the variable physiological parameter as variables therein (see e.g. cols. 30-31).

With respect to claims 5-8, Richardson et al disclose the invention as claimed including a first outing to obtain a first plurality of calculated parameters, each of the first plurality of calculated parameters being calculated based upon a respective determined foot contact time of the user and a corresponding heart rate of the user (see e.g. col. 29, lines 33-38), calculating an average value of the first plurality of calculated parameters (see e.g. col. 29, lines 53-60), the foot contact time and heart rate are the only variables included in an equation used to calculate each of the first plurality of calculated parameters (see e.g. col. 30, lines 31-38), each calculated parameter is proportional to a foot contact time of the user multiplied by a determined heart rate of the user (see e.g. Fig. 17), at least one determined performance parameter and the at least one determined variable physiological parameter in an equation having the performance parameter and the variable physiological parameter as variables therein (see e.g. col. 7, lines 20-28).

With respect to claims 10-17, Richardson et al disclose the invention as claimed including at least one device supported by the user while the user is in locomotion on foot (see e.g. col. 2, lines 17-23), the at least one determined performance parameter of the user includes one of at least one determined speed, pace of the user, and heart rate of the user (see e.g. col. 6, lines 21-25), at least one determined energy expenditure rate of the user (see e.g. col. 29, lines 53-60).

Art Unit: 2863

With respect to claims 18-20, 26-32, the limitations of these claims have been noted in the rejection above. They are therefore consider rejected as set forth above.

With respect to claims 33-39, Richardson et al disclose the invention as claimed including at least one processor configured to determine at least one calculated parameter based upon at least one determined performance parameter of the user and at least one determined variable physiological parameter of the user (see Fig. 9, item 123), at least one first sensor, second sensor that determines the performance parameter of the user while the user is in locomotion on foot and heart rate (see e.g. Figs. 1 and 7), the at least one processor is configured such that foot contact time and heart rate are the only variables included in an equation used to determine the at least one calculated parameter (col. 1, lines 31-35 and col. 30).

With respect to claims 40-43, the limitations of these claims have been noted in the rejection above. They are therefore consider rejected as set forth above.

With respect to claims 48-49, Richardson et al disclose the invention as claimed including the at least one processor is configured such that foot contact time and heart rate are the only variables included in the first equation and the first equation includes as a term therein the at least one determined foot contact time multiplied by the at least one determined heart rate (see e.g. cols. 30-31).

Claims 50-63 and 74-91 are apparatus claims corresponding to method claims 1-8, 10-20, 26-43. Therefore, claims 50-63 and 74-91 are rejected for the same rationales set forth for claims 1-8, 10-20, 26-43.

Art Unit: 2863

With respect to claims 64-69, the limitations of these claims have been noted in the rejection above. They are therefore considered rejected as set forth above.

***Allowable Subject Matter***

6. Claims 9, 21-25, 44-47 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571) 272-2282. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/643,191  
Art Unit: 2863

Page 7

Hien Vo  
March 21, 2004



John Barlow  
Supervisory Patent Examiner  
Technology Center 2800